

ABSTRACT OF THE DISCLOSURE

A method for removing sacrificial layers during the process of fabricating micro-mechanical devices with a solution of super-critical carbon dioxide. A mixture of super-critical carbon dioxide with other solvents, co-solvents and surfactants is used during the process to

5 remove sacrificial layers. The disclosed method has many advantages over the prior art, including a reduction of capillary forces that can damage the free-standing micro-mechanical superstructures, an absence of plasma induced damage caused by ashing operations, and a reduction in the use of environmentally sensitive chemicals. Another advantage of the disclosed process is that the swelling of the photoresist layers is minimized. The disclosed method may be
10 used to remove sacrificial layers that were deposited during the process of fabricating micro-mechanical devices. The method is also effective to remove a protective recoat layer that is deposited over a micro-mechanical device after it has been fabricated.